

fine and mild autumn awaiting me. *A. urticae* L. was still on the wing and a good many Whites. Some remarkably mild weather with very high temperatures were the feature of the last half of this month. On 22nd October and again on the 24th it was just over 70°F, while during the rest of October it was over 60°F almost daily and this high level of warmth continued well into the first week of November. But conditions were much cooler when I visited Kent on the 12th. I tried light at a well-known locality near Wye, but it was too cold for anything of note to be attracted. The whole of November passed without any really cold spell. On the 21st several *Erannis aurantiaria* Hübn. came to light at Virginia Water. Even in December the level of temperature was well into the 50's for most of the month, almost reaching 60°F on the 21st. Even over the Christmas period many of the winter species of moths were to be seen, especially *Erannis defoliaria* Clerck in all its variety of forms.

So ended a year which, though blessed with some remarkably fine weather, was like its predecessor very disappointing as regards migrant insects, with very few of the regular species being recorded. Butterflies were reasonably plentiful, but apart for another good year for the Holly Blue, there was no really outstanding abundance of any particular species, and similar observations can be made of the moths as well.

Three Oaks, Woking.

## Notes on the African Lunar Moth, *Argema kuhnei* Pinhey (Lepidoptera : Saturniidae)

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On 10th September 1968 a yellow male lunar moth was taken at mercury vapour light in Mbala, Zambia. The moth was sent to Dr E. Pinhey, Curator of the National Museum, Bulawayo, who described it (1969) as a new species, *Argema kuhnei*, after its discoverer, K. W. Kühne, Director of the International Red Locust Control Organisation.

I took two more specimens (one of each sex) at mercury vapour light in Mbala in 1970 on 25th August and 3rd September respectively. Pinhey (1972) has subsequently described the female (Plate X).

In April 1971 I noticed an old cocoon fastened to a twig. It appeared to be similar to cocoons of *Argema mimosae* (Bsd) and of *Argema mittrei* (Guer). I considered the probability of its being a cocoon of *A. kuhnei* Pinhey. Later I found another empty cocoon lying on a path just over a mile from Mbala. Kühne sent these two cocoons to Pinhey who agreed that they were probably those of *A. kuhnei* (Plate XI).

The tree on which the first cocoon was found was indentified at the International Red Locust Control Herbarium as *Monotes katangensis* (de Wild). According to Delevoy (1929) this tree

is common in Katanga Province of Zaire, except in the north where it is replaced in the valleys by allied species. It is a tree of wooded savannah and is most frequent in regions of poor soil.

After an intensive search on *M. katangensis* around Mbala I found about thirty cocoons. Only twelve were heavy, indicating living pupae within. The help of villagers was enlisted in the Lunzua district approximately fourteen miles from Mbala. About sixty cocoons were found in this area but all were empty. Kühne also searched for cocoons in Mbala and found approximately thirty but only two were viable.

On 19th August 1971 the supposition concerning the nature of the cocoons was confirmed when two male *A. kuhnei* emerged, indicating *M. katangensis* as a definite foodplant.

In the Mbala district there were seldom more than two cocoons on one tree. Dr J. Scheven and N. S. Irving (in personal communication) stated they experienced heavy losses due to virus when rearing *A. mimosae*. It is possible that *A. kuhnei* is also very virus-prone in some of its early stages. Bush fires may also taken an annual toll of cocoons. From approximately one hundred and twenty cocoons gathered by Kühne, Lunzua villagers and myself, only fourteen yielded moths.

In an attempt to obtain a pairing two moths were kept alive in a muslin charaxes trap. Between 9th and 13th September one hundred and ten eggs were laid. No larvae emerged and all eggs collapsed (Plate XI). An unsuccessful search was made for larvae in September and October.

It appears from the number of cocoons found that *A. kuhnei* is well distributed in the Mbala and Lunzua areas. There are few lepidopterists in Zambia and it is possible that this moth (see Fig. 4) would be found in other parts of the country if a search were made.

Emergence from cocoons 1971: August 19th (2 ♂), 26th (1 ♂), 27th (1 ♂), 28th (1 ♀), 29th (1 ♀), 30th (1 ♂), September 1st (1 ♀), 2nd (1 ♀), 3rd (2 ♀ — K. W. Kühne), 4th (1 ♀), 6th (1 ♀), 8th (1 ♂). All these moths emerged during the afternoon period.

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